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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/930,718	08/15/2001	Roger J. Araujo	SP00-231A	2450

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CORNING INCORPORATED

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CORNING, NY 14831

EXAMINER

BOLDEN, ELIZABETH A

ART UNIT PAPER NUMBER

1755

DATE MAILED: 12/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/930,718

Applicant(s)

ARAUJO ET AL.

Examiner

Elizabeth A. Bolden

Art Unit

1755

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 20,21 and 24-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☒ Claim(s) 22 and 23 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of Group I, claims 1-19, 22, and 23 in Paper No. 8 is acknowledged.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "high silver" in claims 1-11 is a relative term which renders the claims indefinite. The term "high silver" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. While the specification refers to the term "high silver" on page 4, lines 3-4 as to comprising at least 2 cation percent, it also refers to a glass having a high concentration of silver on page 7, lines 21-25 as greater than 1 cation %. This renders the claims indefinite since it unclear how much silver is required to be a "high silver" glass.

The term "high refractive index" in claim 11 is a relative term, which renders the claim indefinite. The term "high refractive index" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art

Art Unit: 1755

would not be reasonably apprised of the scope of the invention. It is unclear how high a value of refractive index is required by this recitation.

The term "negligible attenuation" in claim 11 is a relative term, which renders the claim indefinite. The term "negligible attenuation" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It is unclear what value of attenuation is low enough to be considered negligible.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 9, 11, and 13 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Rindone, **Journal of the Society of Glass Technology**.

Rindone discloses a batch melted, ionic silver, borosilicate glass having a composition, which anticipates instant claims 1-5, 9 and 11. See page 125, lines 1-11 and page 127, lines 31-38. Rindone discloses a clear colorless glass that anticipates the transparent limitation of claim 11 and 13. See page 125, lines 4-5 and page 127, lines 31-38.

Since the composition of the reference is the same as those claimed herein it follows that the glasses of Rindone would inherently possess the same refractive index and attenuation properties as recited in claim 11. See MPEP 2112.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10, 12, and 14-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rindone, **Journal of the Society of Glass Technology**.

Rindone teaches a batch melted, ionic silver, borosilicate glass, which anticipates instant, claims 1-5, 9, 11, and 13. See above rejection, page 125, lines 1-11, and page 127, lines 31-38.

Rindone teaches the glass composition in terms of weight percent. See page 125, lines 7-11.

Rindone differs from the instant application by not teaching any example sufficiently specific to anticipate the compositional limitations of claims 10, 12, and 14-19.

However, it is believed that the weight percent ranges disclosed by Rindone if converted to cation percent would have overlapping compositional ranges with instant claims 10, 12, and 14-19. See page 125, lines 7-11. Overlapping ranges have been held to establish *prima facie* obviousness. MPEP 2144.05.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected from the overlapping portion of the ranges disclosed by the reference because overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

Art Unit: 1755

Claims 1-3, 9, 11, 13-17, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Armistead, U.S. Patent 4,075,024.

Armistead teaches an intermediate borosilicate glass comprising silver in terms of weight percent. See column 1, lines 55 to column 2, line 2 and column 3, lines 19-32. Armistead teaches that the glass when melted yields a clear glass. See column 2, lines 3-5. Armistead teaches that the intermediate borosilicate glass further undergoes a heat treatment to strike the color from the precipitation of metallic silver. See column 2, lines 13-25. Therefore the intermediate glasses of Armistead are colorless comprising ionic silver. See column 1, lines 55 to column 2, line 5 and column 2, lines 13-25.

Armistead differs from the instant application by not teaching any example sufficiently specific to anticipate the compositional limitations of claims 1-3, 9, 11, 13-17, and 19.

However, it is believed that the weight percent ranges disclosed by Armistead if converted to cation percent would have overlapping compositional ranges with instant claims 1-3, 9, 11, 13-17, and 19. See column 1, lines 55 to column 2, line 5, column 2, lines 13-25, and column 3, lines 19-32. Overlapping ranges have been held to establish *prima facie* obviousness. MPEP 2144.05.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected from the overlapping portion of the ranges disclosed by the reference because overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

One of ordinary skill in the art would expect that a glass with overlapping compositional ranges would have the same refractive index and attenuation as recited in claims 1 and 11.

Art Unit: 1755

Claims 1-5, 9, 11-13, 16, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakada, Japanese Patent Publication 2000-302478.

A machine-generated translation of JP 2000-302478 accompanies this action. In reciting this rejection, the examiner will cite this translation.

Nakada teaches a borosilicate glass comprising silver in terms of weight percent. See Abstract and paragraphs [0004], [0007]. Nakada teaches that the glass has a refractive index from 1.57-1.63. See paragraphs [0027] and [0029].

Nakada differs from the instant application by not teaching any example sufficiently specific to anticipate the compositional limitations of claims 1-5, 9, 11-13, 16, and 17.

However, it is believed that the weight percent ranges disclosed by Nakada if converted to cation percent would have overlapping compositional ranges with instant claims 1-5, 9, 11-13, 16, and 17. See Abstract and paragraphs [0004] and [0007]. Overlapping ranges have been held to establish *prima facie* obviousness. MPEP 2144.05.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected from the overlapping portion of the ranges disclosed by the reference because overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

One of ordinary skill in the art would expect that a glass with overlapping compositional ranges would have the same refractive index and attenuation as recited in claims 1 and 11.

Allowable Subject Matter

Claims 6-8, 22 and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and correct any 112 rejections pending in the claims.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art fail to disclose or suggest the further restriction of requiring the addition of the recited components as recited in claims 6-8. Additionally, the prior art fails to discloses or suggest a lens or a gradient index lens made from the glass as recited in instant claims 1 and 10.

Response to Arguments

Applicants' arguments filed 29 September 2003 have been fully considered but they are not persuasive.

Applicants argue that Rindone fails to disclose whether the silver in the glass is present as ionic silver (Ag^+) or metallic Ag° . This is not deemed persuasive since the sliver of Rindone was added to the glass as Ag_2O . See page 125, lines 1-11 of Rindone and above rejection. Rindone further discloses that silver glasses are colorless and transparent when the glass contains less than 40 wt% Ag_2O and that the silver is present as Ag^+ ions. See page 127, lines 31-38.

Applicants further argue that Rindone does not disclose a borosilicate glass since the examples on show a borate glass. This is not deemed persuasive since the reference is not limited to the examples alone for disclosure. See MPEP 2123. Rindone discloses a borosilicate glass sufficiently specific to anticipate limitations of claims 1-5, 9, 11, and 13. See MPEP 2131.03 and the above rejection.

Art Unit: 1755

Applicants argue that the glasses of Rindone cannot be free from metallic silver since "in general it was not believed it could be introduced to the glass by melting a batch containing a silver salt". This is not deemed persuasive since arguments cannot take the place of evidence in the record to overcome a rejection. See MPEP 2145.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth A. Bolden whose telephone number is 703-305-0124. The examiner can normally be reached on 9:30 am-7:00 pm with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark L. Bell can be reached on 703-308-3823. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

After the move to the new USPTO headquarters in Alexandria, Virginia, tentatively scheduled for the week of December 22, 2003, the examiner's new phone number will be (571) 272-1363 and Mark Bell's new phone number will be (571) 272-1362.

EAB
15 December 2003



**DAVID SAMPLE
PRIMARY EXAMINER**